June 27, 2019
10 CFR § 50.73
L-2019-127

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555-0001

Re: Turkey Point Unit 3
Docket No. 50-250
Reportable Event: 2019-001-00
Date of Event: May 18, 2019
Turkey Point Unit 3 Manual Reactor Trip

The attached Licensee Event Report 05000250/2018-001-00 is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(iv)(A) to provide notification of the subject event.

If there are any questions, please call Mr. Robert J. Hess at (305) 246-4112.

Sincerely,

B. Stamp

Brian Stamp
Site Director
Turkey Point Nuclear Plant

Attachment

cc: Regional Administrator, USNRC, Region II
Senior Resident Inspector, USNRC, Turkey Point Nuclear Plant

NRC FORM 366 (04-2018) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 03/31/2020

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of digits/characters for each block)

(See NUREG-1022, R.3 for instruction and guidance for completing this form http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/)

1. Facility Name	2. Docket Number	3. Page
Turkey Point Unit 3	05000 250	1 OF 2

4. Title

Unit 3 Manual Reactor Trip Following Grid Disturbance

5. Event Date			6. LER Number			7. Report Date			8. Other Facilities Involved	
Month	Day	Year	Year	Sequential Number	Rev No.	Month	Day	Year	Facility Name	Docket Number
									N/A	05000
05	18	2019	2019	- 001	- 00	06	27	2019	Facility Name	Docket Number
									N/A	05000

9. Operating Mode	11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: *(Check all that apply)*			
1	☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
	☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
	☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
	☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☒ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
10. Power Level	☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
100	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
	☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(C)	☐ 73.77(a)(1)
	☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(D)	☐ 73.77(a)(2)(ii)
	☐ 20.2203(a)(2)(vi)	☐ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(vii)	☐ 73.77(a)(2)(iii)
		☐ 50.73(a)(2)(i)(C)	☐ Other (Specify in Abstract below or in NRC Form 366A	

12. Licensee Contact for this LER

Licensee Contact	Telephone Number (Include Area Code)
David Stoia – Licensing Engineer	(305) 246-6538

13. Complete One Line for each Component Failure Described in this Report

Cause	System	Component	Manufacturer	Reportable To ICES	Cause	System	Component	Manufacturer	Reportable To ICES

14. Supplemental Report Expected	15. Expected Submission Date	Month	Day	Year
☐ Yes (If yes, complete 15. Expected Submission Date) ☒ No				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 14 single-spaced typewritten lines)

On 5/18/19 at 11:08am, the Turkey Point Unit 3 reactor was manually tripped from 100% power due to lowering levels in all three Steam Generators. Auxiliary Feedwater automatically actuated and was subsequently secured at 11:53am during plant post-trip restoration. The cause of the event was a grid disturbance that resulted in the Turbine Control Valve (TCV) position deviation faults. All four of the TCVs drifted closed in response to the faults by design. As a result, levels in all three Steam Generators steadily decreased, prompting the Unit 3 Reactor Operator to initiate a manual trip of the Unit 3 reactor. All systems responded as designed during the transient.

LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET

(See NUREG-1022, R.3 for instruction and guidance for completing this form http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/)

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1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Turkey Point Unit 3	05000-250	2019	- 001	- 00

NARRATIVE

Event Description

On 5/18/19 at 11:08am, the Turkey Point Unit 3 reactor [AC, RCT] was manually tripped from 100% power due to lowering levels in all three Steam Generators (S/G) [SB, SG]. Auxiliary Feedwater (AFW) [BA] automatically actuated and was subsequently secured at 11:53am during plant post-trip restoration. The cause of the event was a grid disturbance that resulted in the Turbine Control Valve (TCV) position deviation faults. All four of the TCVs drifted closed in response to the faults by design. As a result, levels in all three Steam Generators steadily decreased, prompting the Unit 3 Reactor Operator to initiate a manual trip of the Unit 3 reactor. All systems responded as designed during the transient.

The Reactor Protection System (RPS) [JC], and AFW actuations were reported in accordance with 10 CFR 50.72 in Event Notification 54072 and are also reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A).

Cause

The cause of the event was a grid disturbance that originated on a remote Transmission line section that resulted in the Turbine Control Valve (TCV) position deviation faults. All four of the TCVs drifted closed in response to the faults by design. This in turn lowered feedwater level in all three S/Gs. Upon observation of the S/G level shrinkage, the Unit 3 RO initiated a manual trip of the Unit 3 reactor.

Safety Analysis

Safety significance is very low because the unit responded as designed to the trip. There were no failures of safety-related equipment.

The momentary grid disturbance resulted in the Turbine Control Valve (TCV) position deviation faults. All four of the TCVs drifted closed in response to the faults. The TCV positioning system functioned as designed.

Because of the reduced steam flow from the S/Gs, Pressurizer pressure increased to the PORV opening setpoint. PCV-3-456 cycled to restore pressurizer pressure to within its normal band. The response of the Pressurizer pressure control system was expected given the conditions.

Protective relay features in the Turkey Point switchyard functioned as designed in response to the grid disturbance.

Corrective Actions

Following the manual Unit 3 reactor trip, Operations personnel manually restored normal control of the TCVs. No corrective actions related to the Unit 3 response to the grid disturbance are required.

Additional Information

EIIS Codes are shown in the format [IEEE system identifier, component function identifier, second component function identifier (if appropriate)].

Failed Components Identified

There were no failed components identified during or after the grid disturbance or manual Unit 3 reactor trip.

Similar Events

There were no similar events reported in the past three years for Turkey Point Units 3 and 4.